How can you stay safe around transmission lines?

Look up. You may be in danger and don't even know it. Every day, people across the Northwest work near high-voltage power lines and do so safely. But it only takes one mistake to cause a tragedy.

By following common sense and a few simple rules, you can work in safety. This applies whether you are in construction, logging, farming and irrigation, driving an overheight vehicle, or simply storing materials near transmission towers. If that's you, you should know:

Height can be hazardous. Equipment doesn't have to touch the transmission line to zap you. Electricity can "arc" if your equipment is too close. Metal is a perfect conductor to bring electricity directly into your body. Nothing under a power line should be higher than 14 feet from the ground.

Using explosives near transmission lines also can be hazardous. Blasting caps and other electronic detonators can be discharged accidentally. Do not use these within 1,000 feet of a transmission line. Your power utility should be notified of any plans to use explosives near power lines.

Look before you log. Trees can conduct electricity too. You are particularly vulnerable if there is smoke, dust or mist in the air. Call your power utility before you begin work. If in Oregon, call the Oregon Utility Notification Center at 1-800-332-2344 before you begin work. If a tree falls into a power line, STOP AND GET CLEAR! Call your power utility immediately.

Metal objects located near transmission towers are trouble waiting to happen. This includes such things as fences, irrigation pipes, storage and debris. In one case electricity flowed from the tower, through debris into a chain-link fence and into a home, destroying the homeowner's wiring. In another electricity entered a nearby irrigation pipe and damaged nearly 600 feet of pipe. In both cases, people were lucky. No one was hurt. Fences and irrigation pipe should be located at least 50 feet from steel towers and 25 feet from wood pole structures.

Here are a few other common sense tips:

Transmission towers can attract lightning. If you are standing near a tower when lightning is striking, you're in danger. Play it safe. Stay away from power lines and other tall objects during electrical storms.

Do not refuel vehicles and other equipment, such as generators, on transmission corridors. Power lines can give off small, electric sparks. Under the right conditions, these can ignite fuel vapors.

Why is Bonneville Power Administration involved?

The Bonneville Power Administration has an obligation to provide reliable electric service to utilities and consumers. Nearly half the 10 million people in the Northwest depend on this power. That includes hospitals, schools, businesses, homes – and you.

Most uses on BPA's transmission corridors, also called "rights-of-way," require a permit from BPA.

Stay away... and stay alive

Maybe you and your equipment have been closer to a high-voltage line – and nothing has happened. That's possible, but you were lucky.

The amount of electricity it takes to operate a 10-watt light bulb is more than enough to kill you.

Transmission lines aren't your common street wires. Power lines through residential areas carry on average 12.5 kilovolts. Transmission lines can carry 40 times that.

Lines can sag as much as 15 feet or more during hot weather or when carrying heavy electrical loads. Electricity from high voltage lines also can "arc" or "flashover" from wires to your equipment before you actually make contact.

Protect yourself from liability. Make sure all your subcontractors know how to stay safe near power lines.

If you have any doubt

Call 1-800-836-6619 and ask how to work safely near transmissions lines, or for one of the following brochures:

- Living and Working Safely Around High-Voltage Power Lines (DOE/BP-1821)
- Landowner's Guide to Use of BPA Right of Way (DOE/BP-3025)
- Landowner's Guide to Trees and Power Lines (DOE/BP-3026)
- Keeping the Way Clear for Better Service (DOE/BP-2816)

or check the web site at www.transmission.bpa.gov